

REMARKS

The specification and claims have been carefully reviewed in light of the examiner's action. Claim 1, has been canceled and rewritten as new Claim 5. Claim 2 has been cancelled.

No new matter has been added.

Before taking up the claims in detail attention will be given briefly to the patents cited by the examiner.

The U.S. Patent to Gaston No. 5,424,895 describes an electrical wiring system with over temperature protection, which is described for use in a household electrical circuit, wherein a sensor wire is run coextensively with the hot, neutral or ground wire in an electrical circuit. The wire senses the over temperature and through a control circuit trips the circuit breaker. This sensor wire is not a thermal cut off device, is remote from the device and does not respond to a temperature rise in the device but to a temperature rise in the circuit. The system of Gaston does not protect the device, and does not remotely suggest protection of an apparatus or appliance as does applicant.

The U.S. Patent to Deng No. 5,876,250 describes a plug having a replaceable fuse, which is what applicant's invention seeks to avoid by having a non-replaceable fuse in the plug. Deng does not even remotely suggest using a non-replaceable fuse.

In rejecting claims 1 and 3 as obvious under 35 USC 103, the examiner combined the Gaston and Deng patents.

THE APPLICABLE STANDARDS FOR COMBINING REFERENCES UNDER SECTION 103

The Patent and Trademark Office must prove a prima facie case of obviousness of the claimed invention.

“One of the more difficult aspects of resolving questions of non-obviousness is the necessity ‘to guard against slipping into the use of hindsight.’” In re Carroll, 601 F.2d 1184, 1186, 202 USPQ 571, 572 (CCPA 1979) (quoting Graham v. John Deere Co., 383 U.S. 1, 36 [148 USPQ 459, 474] (1965)). The Patent and Trademark Office has the burden of showing that the prior art would have taught or suggested the claimed invention to one of ordinary skill in the pertinent art, In re Clinton, 527 F.2d 1226, 1228, 188 USPQ 365, 367 (CCPA 1976).

In re Shaffer, 108 USPQ 326, 229 F.2d 476 (CCPA)/1956) is one of many cases in which it is pointed out that for a combination of old elements to be patentable, the elements must cooperate in such manner as to produce a new, unobvious, and unexpected result, citing In re Kaufman, 39 CCPA (Patents) 769, 193 F.2d 331, 92 USPQ 141 and In re Lindberg, 39 CCPA (Patents) 866, 194 F.2d 732, 93 USPQ 23.

The Court in Shaffer said:

“Furthermore, as a general matter, in determining patentability, the concept of a new and useful improvement must be considered along with the actual means of achieving the improvement. In re Delancy, 34 CCPA (Patents) 849, 159 F.2d 737, 72 USPQ 477. In re Bisley, 39 CCPA (Patents) 982, 197 F.2d 355, 94 USPQ 80.”

In determining obviousness it is necessary to determine whether the references themselves suggest the desirability of the proposed combination.

In re Bergel and Stock 292 F.2d 955, 956-7, 130 USPQ 206, 208 (CCPA 1961) and In re Grabiak 769 F.2d 729, 732, 226 USPQ 870, 872 (Fed. Cir. 1985).

And in In re Imperato, 286 F.2d 585, 179 USPQ 730 (CCCPA 1973) it is stated:

“The mere fact that the disclosures of the prior art can be combined does not make the combination obvious unless the art also contains something to suggest the desirability of the combination. In re Bergel. Supra.”

See also Interconnect Planning Corporation v. Feil, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985).

Also, in In re Dow Chemical Co., 5 USPQ 2d 1529, (CAFC 1988) the Court said at page 1532:

‘The PTO presents, in essence, an ‘obvious to experiment’ standard for obviousness. However, selective hindsight is no more applicable to the design of experiments than it is to the combination of prior art teachings. There must be a reason or suggestion in the art for selecting the procedure used, other than the knowledge learned from the applicant’s disclosure.’”

Further, in In re Geiger, 2 USPQ 2d 1276 (CAFC 1987) the Court said at p. 1278:

“At best, in view of these disclosures, one skilled in the art might find it obvious to try various combinations of these known scale and corrosion prevention agents. However, this is not the standard of 35 U.S.C. Sec. 103.”

In order to establish a prima facie case of obviousness, the prior art teachings must be sufficient to suggest making the claimed safety enhancement device. Here, there is no evidence of record which would have led one of ordinary skill at the time the invention was made to combine the prior art in the manner the Examiner proposes, to achieve applicant's device.

There must have been a reason apparent at the time the invention was made to the person of ordinary skill in the art for applying the teaching at hand, in the manner proposed or the use of the teaching as evidence of obviousness will entail prohibited hindsight. In re Nomiya, 509 F.2d 566, 184 USPQ 607, 613 (CCPA 1975).

Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d 413, 415, 208 USPQ 871, 881 (CCPA 1981). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933, (Fed. Cir. 1984).

See also:

In re Donovan and Ryan, 184 USPQ 414 (CCPA 1975)

In re Regel, Buchel and Plempel, 526 F.2d 1399, 188 USPQ 136 (CCPA 1976)

Ex parte Shepard and Gushue, 188 USPQ 563 (1974)

In re Reinhart 531 F.2d 1048, 189 USPQ 143 (CCPA 1976)

In Ex parte Thompson, 184 USPQ 558, the board, in considering a Section 103 rejection stated that it would not be obvious to substitute an element of a first reference for an element of a second reference, since to do so would destroy the apparatus of the second reference for its intended purpose.

See also:

Ex parte Hartman, 186 USPQ 366 (1974)

In re Meng and Driessen, 492 F.2d 843, 181 USPQ 94 (CCPA 1974) states:

“As we said in In re Shuman, 53 CCPA 1251, 361 F.2d 1008, 1012, 150 USPQ 54, 57 (1966) references must be evaluated by ascertaining the facts fairly disclosed therein as a whole.”

The CAFC in a recent case set forth the proper inquiry for evaluating references as:

References must be considered for all that they teach. W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1550, 220 USPQ 303, 311 (Fed. Cir. 1983) cert. Denied, 469 U.S. 851 (1984).

See also In re Fritch, 23 USPQ 2d 1780 (CAFC 1992).

The CAFC has defined the standards for combination of references as requiring the combination to be “clear and particular”. See In re Dembisek 175 F.3d 994, 999 (CAFC 1999), and Winner Int’l Royalty Corp. v. Wang, 202 F.3d 1340 (CAFC 2000) Reh’g en Banc denied (Mar 6, 2000), Cert. Denied 120 S.C.T. 2679 (U.S. 2000).

In combining references, the Examiner did not and could not:

1. Find any suggestion of the desirability of the proposed combination;
2. Find any suggestion for combining the references in the references themselves;
3. Find any suggestion in the references taken as a whole of the claimed device;
4. Find the actual device as claimed and employed to achieve a new and unexpected result.

The examiner also rejected Claim 4 as obvious over Gaston, Deng and Lu No. 5,249,986. The standards for combination under 35 USC 103 as stated above apply equally to the combination of Gaston, Deng and Lu.

The examiner in the action on page 3 refers to Deng as having plastic encapsulating the cover and preventing access to the fuse. This statement is incorrect as reference to column 3 lines 1, 2 reads "access 210 of the main casing body 21 allows replacement of the fuse 15 after the upper lid 30 is removed."

Deng has a replaceable fuse and no plastic layer encapsulating the plug in direct contrast to applicant's device.

The Lu Patent also has replaceable fuses as described in column 1, lines 17-21. Accordingly, Lu does not suggest or disclose the device of applicant.


Claim 5 calls for an enhanced safety device combination for electrical apparatus or appliances, with a cordset having a plug with a non-replaceable fuse, that finds no response in the references. Claim 5 also calls for a thermal cut-off device inside the apparatus, which senses a temperature rise in the device and cuts off the circuit, also finds

no response in the references. The combination of a plug with a non-replaceable fuse and with a thermal cut-off device inside the apparatus or appliance, finds no response in the references alone or in combination.

Claims 3, and 4 dependent on new claim 5 with all its limitations also define structure not found in the references, alone or in combination.

Accordingly, it is believed that the application is in condition for allowance and such action is requested and urged.

Respectfully submitted,


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TECHNOLOGY CENTER 2800I CLAIM

1. An enhanced safety device combination for electrical apparatus or appliances which comprises,
- a cordset connected to said apparatus or appliance,
- said cordset having a set of wires including at least a neutral wire and a positive wire,
- a cordset plug connected to said wires,
- ^{NON REPLACEABLE}
a fuse in said plug connected in series with said one of said wires,
- ^
said wires are connected to switch means,

second wires connecting said switch means to said apparatus or appliance, and
^{INSIDE SAID APPARATUS OR APPLIANCE}
a thermal cut-off device in series with said one of said second wires and said
apparatus or appliance.
^{TO SENSE THE TEMPERATURE OF THE APPARATUS OR APPLIANCE TO CUT OFF THE CIRCUIT TO PROTECT SAID APPARATUS OR APPLIANCE FROM DAMAGE IN THE EVENT OF A TEMPERATURE RISE,}

- ~~2. An enhanced safety device combination as defined in claim 1 in which~~
~~said switch means is a multi-position rotary switch.~~

3. An enhanced safety device combination as desired in claim ⁵ in which
said fuse is in series with said positive wire.

4. An enhanced safety device combination as defined in claim ⁵ in which

said cordset plug includes a plug cover open at one side,

a cap which snaps into said cover to close off the open side,

at least two spades extending from said plug carried in said cover, and which may be connected to said switch means by said set of wires, and an outer layer of plastic encapsulating said cover and said cap, thereby preventing access to said fuse.

5. An enhanced safety device combination for electrical apparatus or appliance which comprises,

a cordset connected to said apparatus or appliance,
said cordset having a set of wires including at least a neutral wire and a positive wire,

a cordset plug connected to said wires,
a non replaceable fuse in said plug connected in series with said one of said wires,

said wires are connected to switch means,
second wires connecting said switch means to said apparatus or appliance, and

a thermal cut-off device inside said apparatus or appliance in series with said one of said second wires and said apparatus or appliance, to sense the temperature of the apparatus or appliance to cut off the circuit to protect said apparatus or appliance from damage in the event of a temperatures rise.

3. An enhanced safety device combination as defined in claim 5 in which said fuse is in series with said positive wire.

4. An enhanced safety device combination as defined in claim 5 in which said cordset plug includes a plug cover open at one side,

a cap which snaps into said cover to close off the open side,

at least two spades extending from said plug carried in said cover, and which may be connected to said switch means by said set of wires, and an outer layer of plastic encapsulating said cover and said cap, thereby preventing access to said fuse.